Figure 1

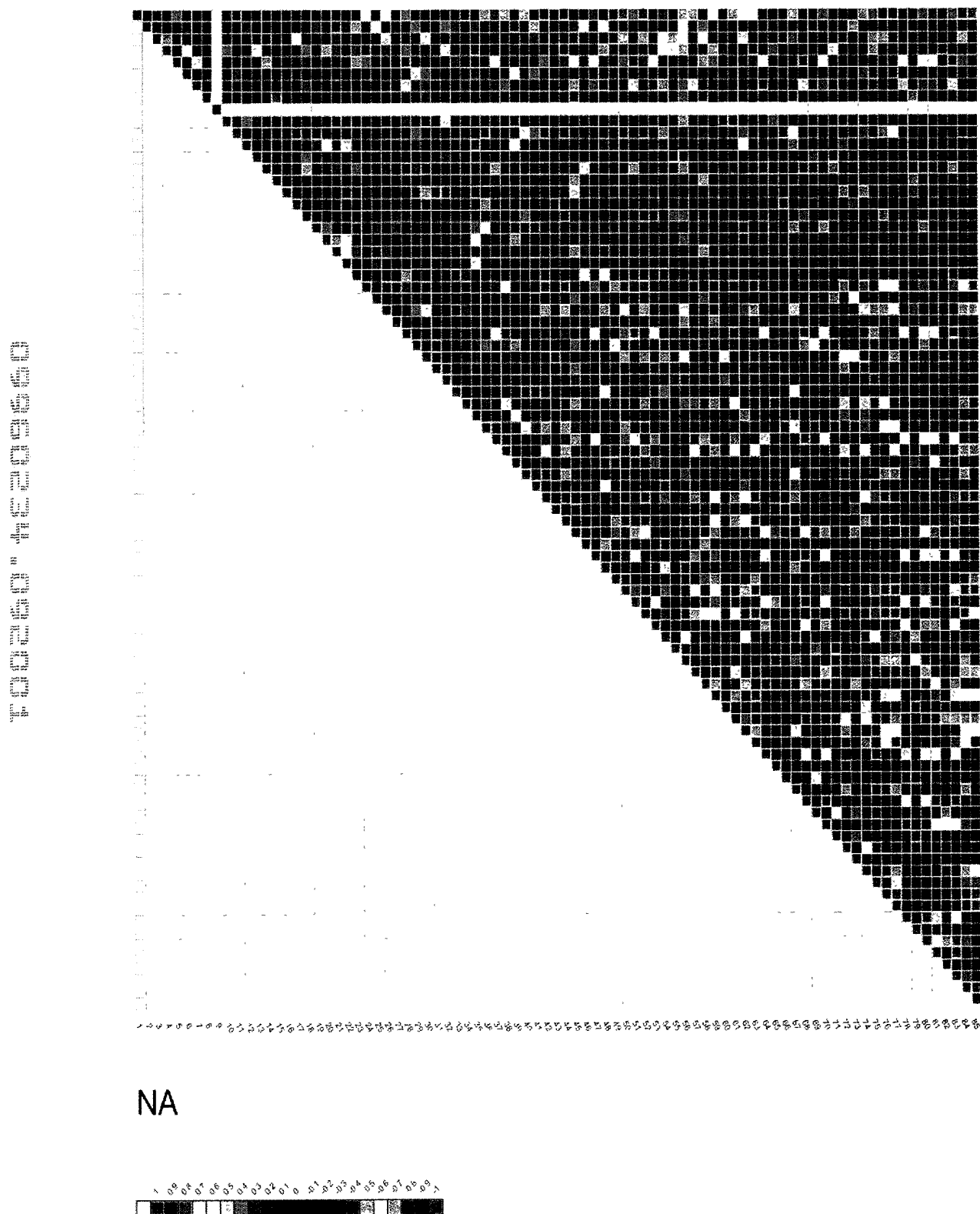## Figure 2: Colorization of a random correlation matrix for BN

NA

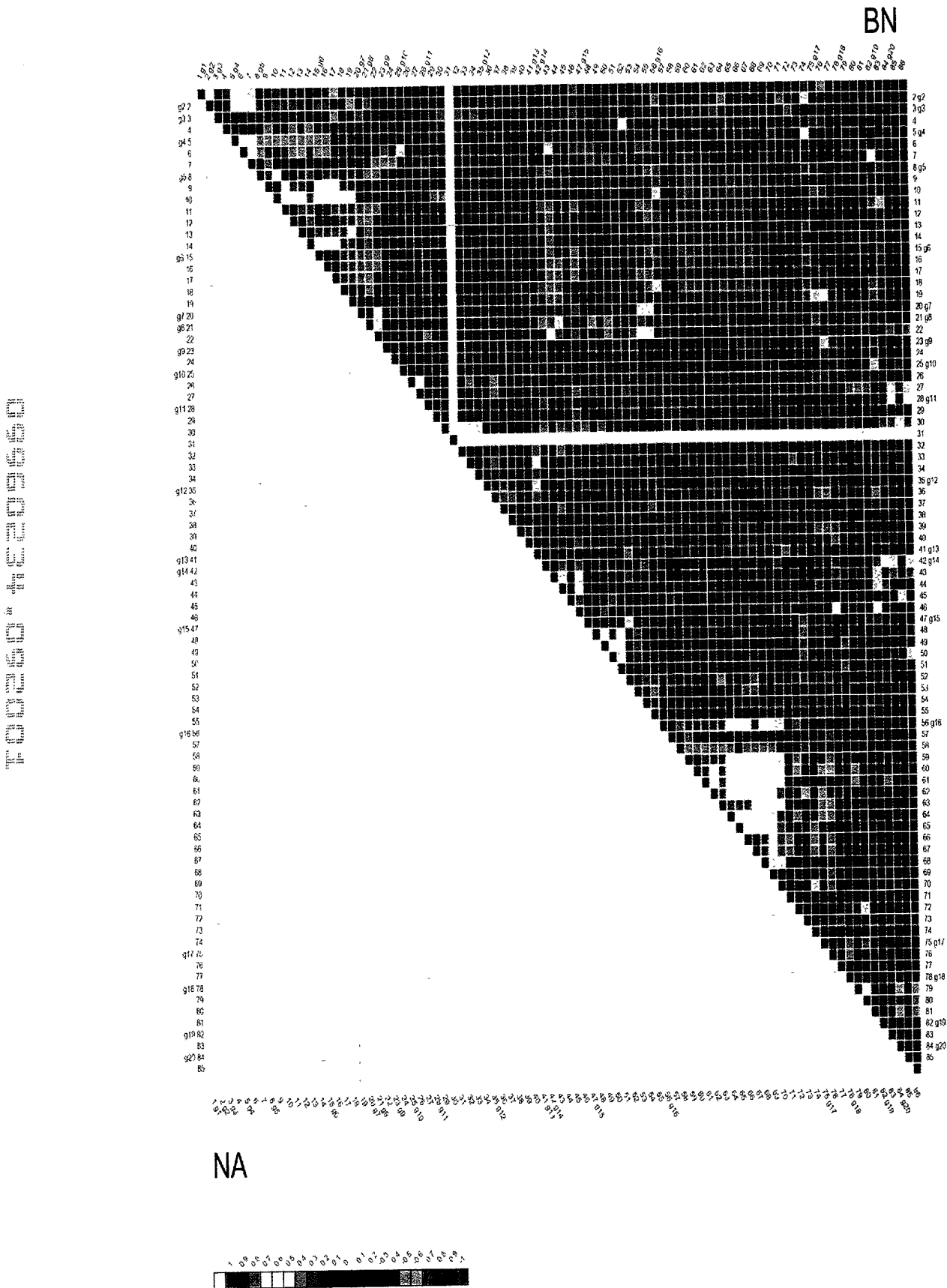## Figure 3: Functionally clustered physiological profile

Figure 4: Composite matrices of two physiological profiles generated by functional clustering and algorithm-based clustering
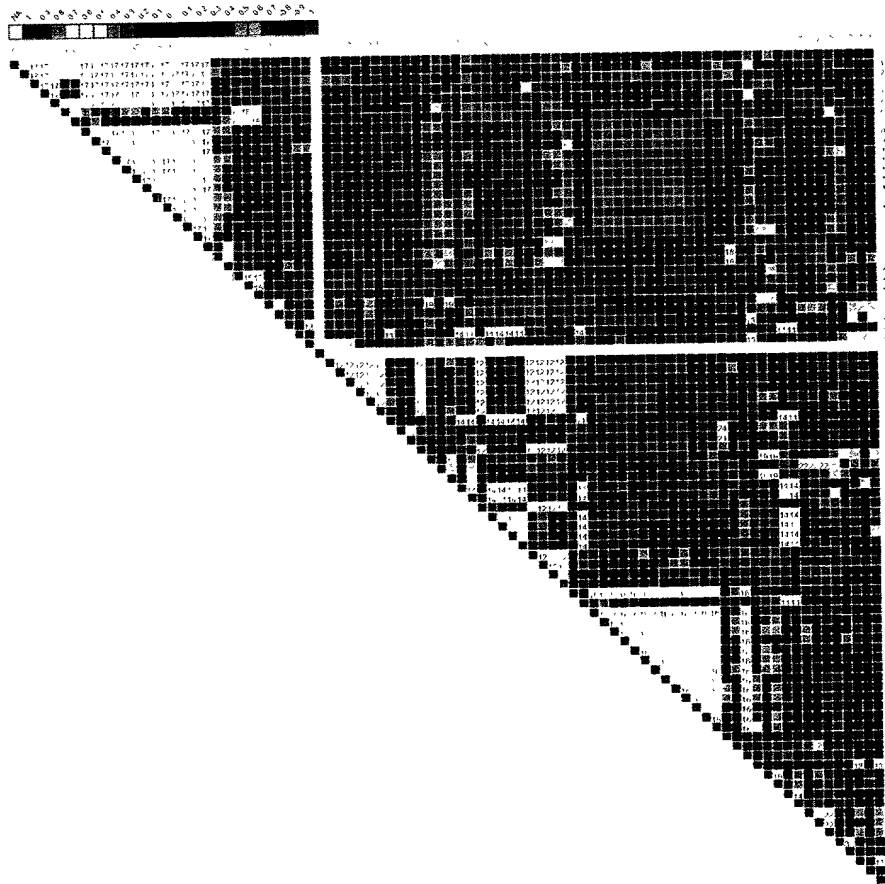
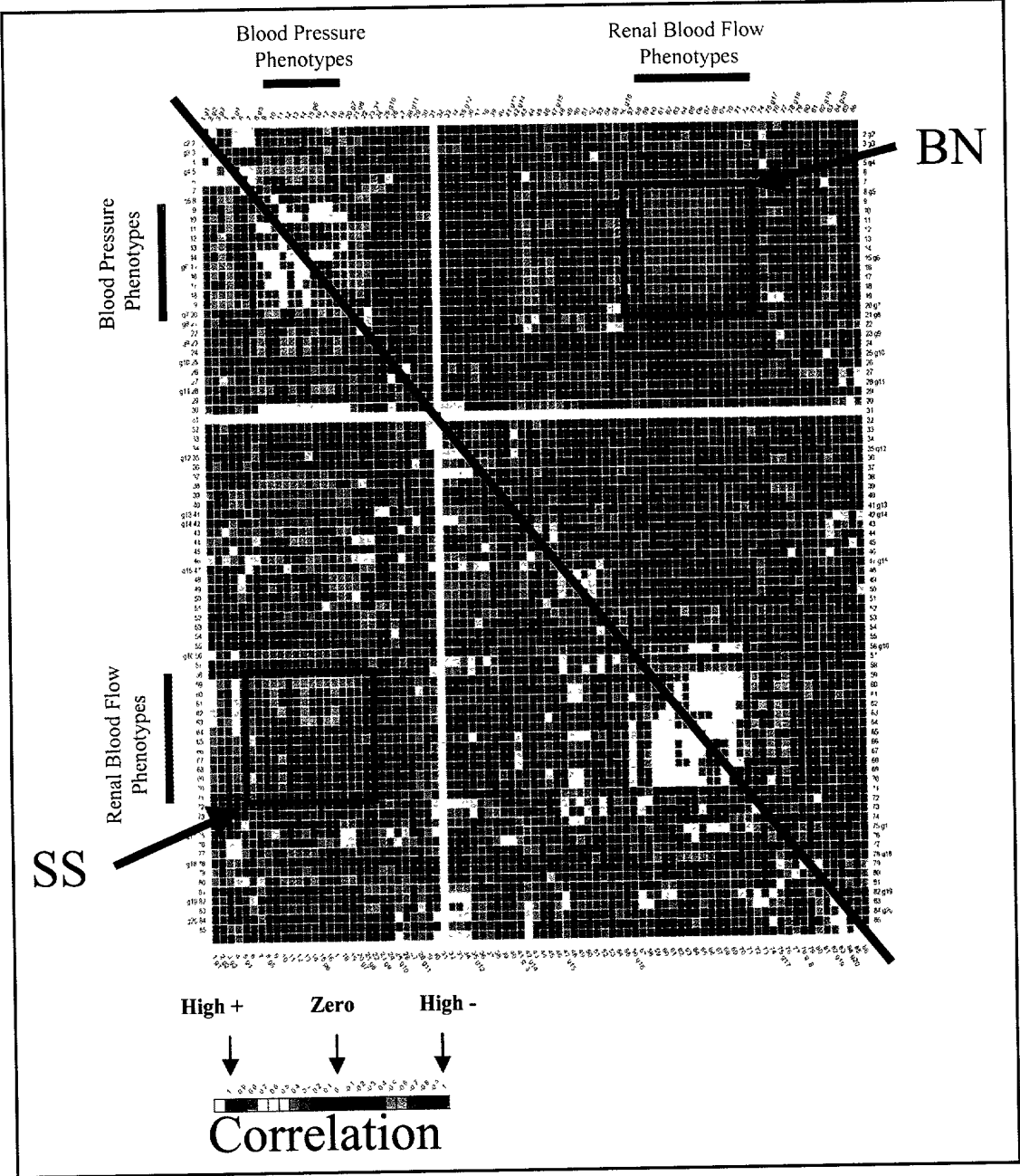Figure 5: Physiological Profiling of autoregulation of blood flow in the SS and BN rat.

Figure 6: Composite profiles of parental BN and F2 progeny rats generated by overlaying functionally clustered correlation matrices with algorithm clustered correlation matrices
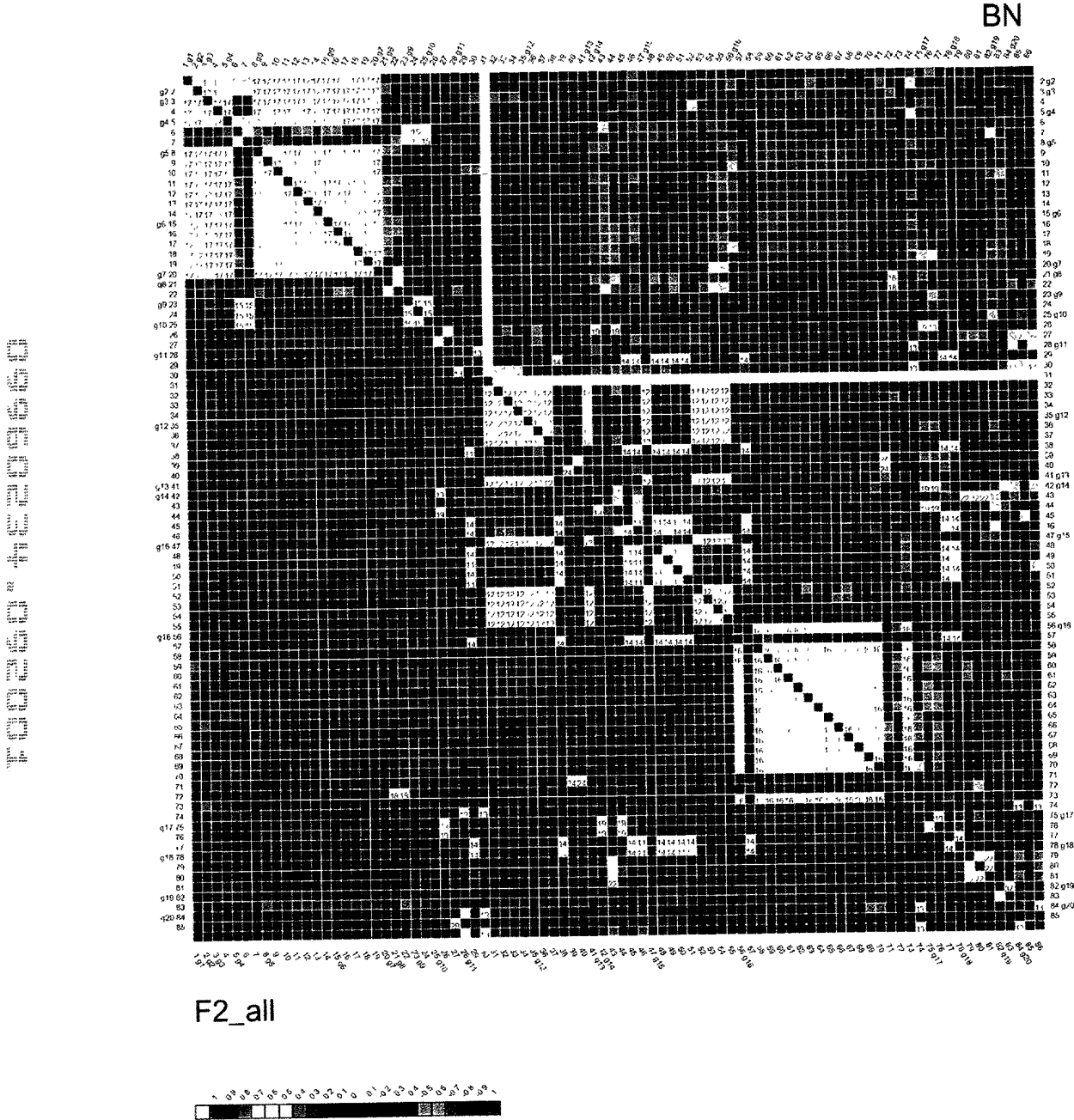
Figure 7A: Physiological profiles of the entire F2 population and the F2 progeny population that fall in the left 10 % of a distribution after a salt challenge

F2_lt

F2_all

Figure 7B: Physiological profiles of the entire F2 population and the F2 progeny population that fall in the right 10 % of a distribution after a salt challenge
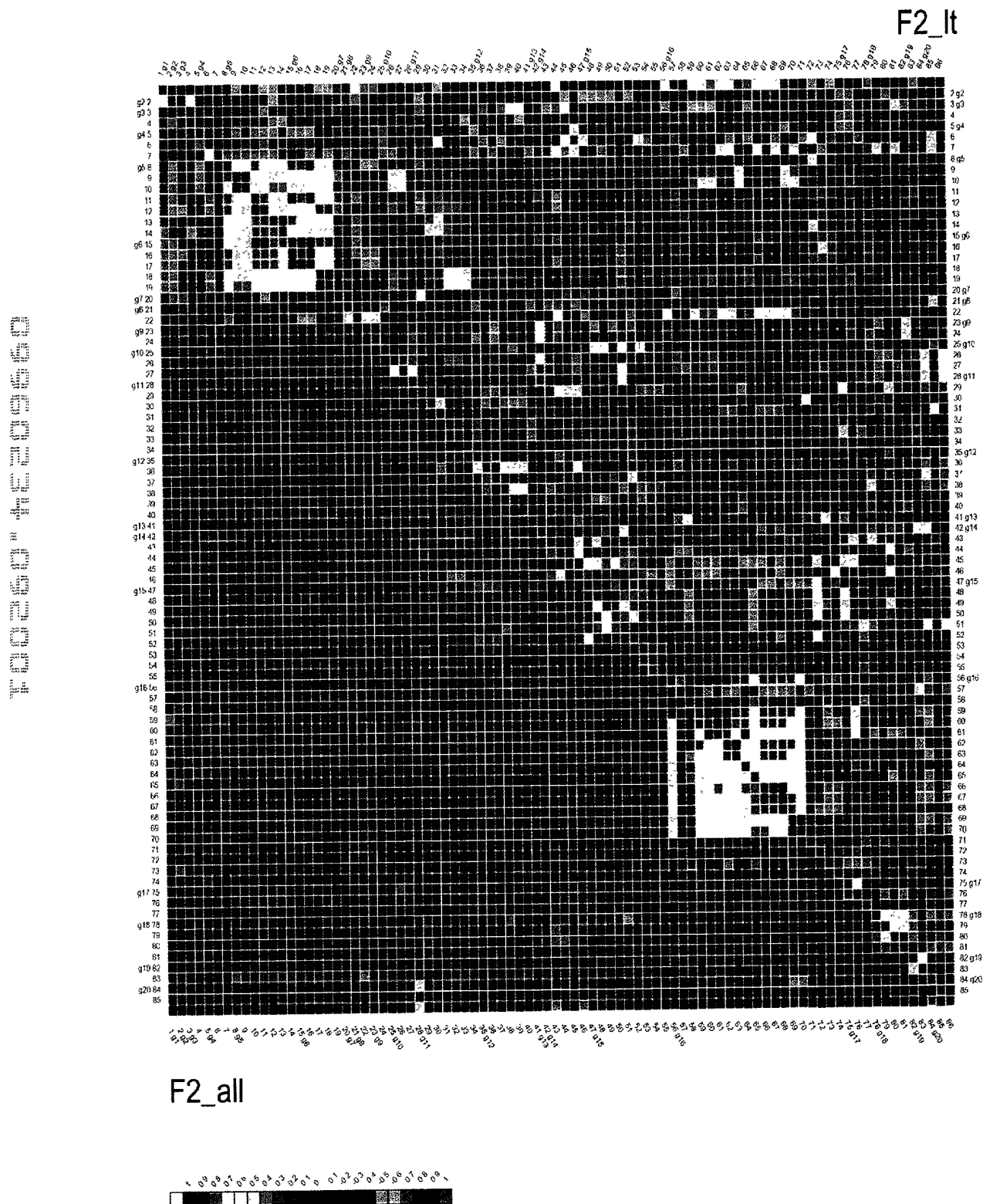
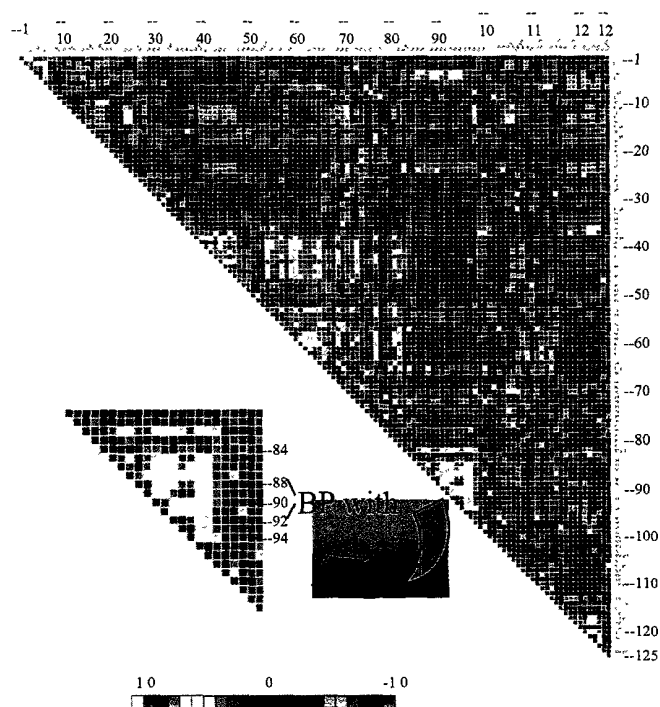F2 male genotype homozygote SS/SS at D10Mgh14 marker on chr 10

F2 male genotype homozygote BN/BN at D10Mgh14 marker on chr 10
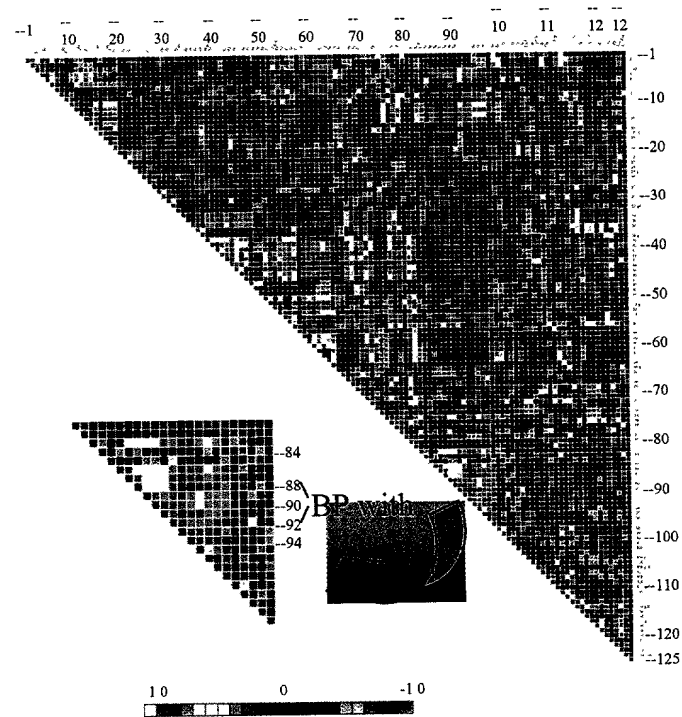
Figure 9

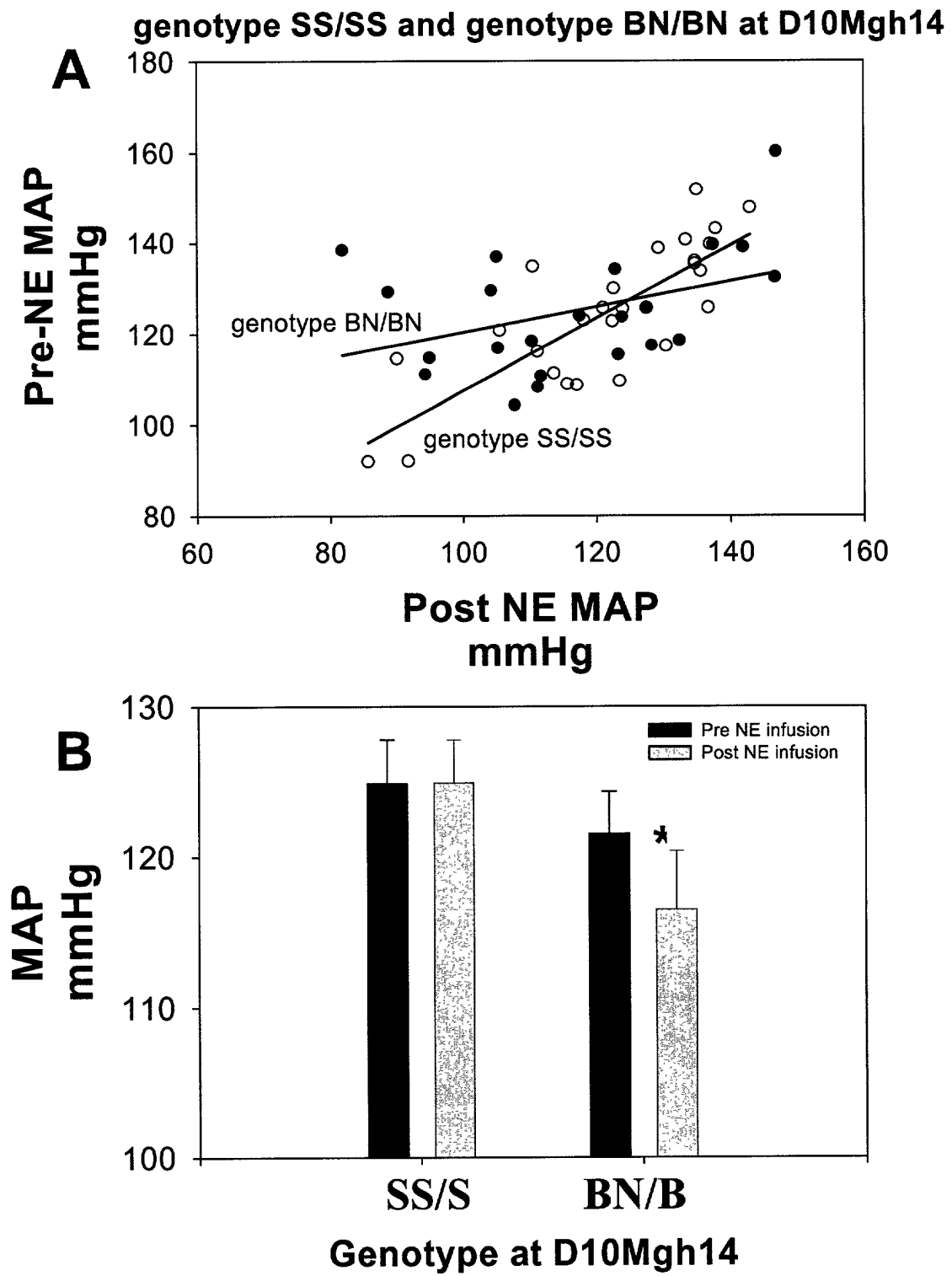genotype SS/SS and genotype BN/BN at D10Mgh14

Figure 10: physiological profiles of French Canadian and African American hypertensive patients